

## WHAT IS CLAIMED IS:

1. A tilt detector for detecting a tilt of a recording surface of an optical disc, comprising:

5 light emitting means for emitting a divergent beam of light to be incident on said recording surface of said optical disc;

10 a collimating lens for collimating the divergent beam of light emitted from said light emitting means and directing the collimated beam of light onto said recording surface of said optical disc;

15 a condensing lens for condensing the collimated beam of light from said collimating lens, directed onto said recording surface of said optical disc and then reflected from said recording surface; and

20 light receiving means for receiving said collimated beam of light condensed by said condensing lens and detecting the centroid of the intensity of the received beam of light, said light receiving means including a receiving surface partitioned into a plurality of areas for receiving said collimated beam of light condensed by said condensing lens.

2. The tilt detector as set forth in Claim 1, wherein said collimating lens and condensing lens constitute a single  
25 transmitting/receiving lens.

3. The tilt detector as set forth in Claim 2, wherein said light emitting means and light receiving means are arranged symmetrically on the basis of an optical axis of said transmitting/receiving lens.

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4. The tilt detector as set forth in Claim 2, wherein said light emitting means and light receiving means are arranged on an optical axis of said transmitting/receiving lens.

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5. The tilt detector as set forth in Claim 2, wherein said transmitting/receiving lens has two centers of curvature.